

DETAILED ACTION

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Ting-Mao Chao on June 16, 2011.

The application has been amended as follows:

The last line of the abstract reads as follows, "calculated characteristics". This should be changed to --calculated fluid flow characteristics--.

In line 1 of claim 1, delete "mechanism".

Line 2 of claim 1 reads as follows, "introducing fluid". This should be changed to --introducing a fluid--.

Line 3 of claim 1 reads as follows, "on the internal". This should be changed to --on internal--.

Lines 7-8 of claim 1 read as follows, "performing chemical". This should be changed to --performing a chemical--.

At the end of line 9 in claim 1, delete "the".

Line 11 of claim 1 reads as follows, "pump based". This should be changed to --pump, based--.

Line 13 of claim 1 reads as follows, "the pumping mechanism". This should be changed to --the pump--.

Line 15 of claim 1 reads as follows, "calculated characteristics". This should be changed to --calculated fluid flow characteristics--.

Line 2 of claim 4 reads as follows, "comprises inert". This should be changed to - -comprises an inert--.

Line 1 of claim 5 reads as follows, "the purge". This should be changed to --the inert purge--.

Line 1 of claim 6 reads as follows, "the purge". This should be changed to --the inert purge--.

Lines 1-2 of claim 7 read as follows, "wherein a second fluid is also introduced to the pump, this second fluid being inert purge gas". This should be changed to --wherein the fluid comprises a first and a second fluid introduced to the pump, the second fluid being an inert purge gas--.

Line 2 of claim 12 reads as follows, "the group". This should be changed to --a group--.

Line 2 of claim 16 reads as follows, "recoding pressure". This should be changed to --recording a pressure--.

In lines 4, 6, 9, 10, 11 and 12 of claim 17, "pump" should be changed to -- vacuum pump--.

Lines 6-7 of claim 17 read as follows, "performing chemical". This should be changed to --performing a chemical--.

At the end of line 8 in claim 17, delete "the".

Line 9 of claim 17 reads as follows, "on the internal". This should be changed to --on internal--.

Lines 12-13 of claim 17 read as follows, "one port". This should be changed to --one fluid port--.

Line 13 of claim 17 reads as follows, "of ports". This should be changed to --of fluid ports--.

Lines 14-15 of claim 17 read as follows, "calculated characteristics for acting on deposits located on the element surfaces to enable the deposits to be removed therefrom". This should be changed to --calculated fluid flow characteristics for acting on deposits located on the internal working surfaces of the vacuum pump to enable the removal of deposits therefrom--.

Allowable Subject Matter

Claims 1-20 are allowed. The following is an examiner's statement of reasons for allowance: The prior art does not teach a vacuum pump comprising:

means for calculating fluid flow characteristics required to compensate for accumulation of deposits on internal working surfaces of the vacuum pump based on the monitored performance of the vacuum pump and process data received from a tool adapted to be evacuated by the vacuum pump; and

means for introducing fluid into the vacuum pump at a localized area via at least one fluid port selected from a plurality of fluid ports within the vacuum pump in accordance with the calculated fluid flow characteristics, for acting on deposits located

on the internal working surfaces of the vacuum pump to enable the removal of deposits therefrom in a manner that avoids backward contamination of the tool by the fluid.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BRYAN LETTMAN whose telephone number is (571)270-7860. The examiner can normally be reached on Monday - Thursday between 9:00 am and 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Devon Kramer can be reached on (571) 272-7118. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Devon C Kramer/
Supervisory Patent Examiner, Art
Unit 3746

/B. L./
Examiner, Art Unit 3746